Enabling Citizen Participation in Gov 2.0: An Empowerment Perspective

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Abstract: In order to investigate the low levels of citizen participation in Gov2.0, we used the theoretical lens of empowerment to better understand the use of Gov2.0. The paper includes an analysis of both management and psychology literatures; elaborates and discusses the conceptual issues of citizen empowerment, satisfaction, and participation in Gov2.0. A research model to enhance the understanding of citizen participation in Gov 2.0 is presented in this paper. The model includes four factors pertaining to empowerment theory: sense of impact, competence, meaningfulness and sense of control, which are believed to influence citizen participation in Gov2.0. A further positive outcome of citizen empowerment is higher levels of satisfaction with Gov 2.0. These suggestions make a strong case for citizen empowerment in Gov 2.0 to enhance the understanding of citizen participation in Gov. 2.0 as well as providing useful information for government agencies. Government agency decision-makers can also benefit from new insights into citizen participation and enhance citizen experiences with Gov2.0. The paper concludes with implications for theory and practice, and suggests avenues for future work.

Keywords: Gov 2.0, citizens, participation, empowerment, satisfaction

1. Introduction

Web 2.0 technologies have socially transformed the world; we see this, for example in the Arab Spring, the Occupy Wall Street (McNutt, 2012) protest, and more recently, the Umbrella movement in Hong Kong. Web 2.0 technologies are often referred to as Social Media (Bekkers, Edwards, and de Kool, 2013; Bertot et al., 2010); the two concepts are commonly used interchangeably and described in the literature as "umbrella terms" (U.S. General Services Administration 2009:1). Bryer and Zavattaro (2011) used the means-versus-ends analysis to distinguish Web 2.0 technologies as the latest means by which people can achieve social ends. By Web 2.0 technologies, we mean "social networking services (Facebook, MySpace), social media or multimedia sharing (YouTube, Flickr), wikis, blogs, micro blogs (Twitter), and mash-ups (Bertot et al., 2010). Web 2.0 technologies vary from other Information and Communication Technologies (ICTs) by the user-driven capabilities (Bryer and Zavattaro, 2011). They enable collaboration, interaction and participation (Criado, Sandoval-Almazan and Gil-Garcia, 2013), and that is what transforms Web 2.0 technologies into social media. Furthermore, Web 2.0 technologies have changed the way in which government agencies share and communicate information, which has led to the concept of Gov2.0 (Bonsón et al., 2012). The following definition further clarifies Gov2.0: "The use of social networking platforms, content creation and sharing tools, blogs, and microblogging tools within government organisations and their interactions with citizens" (Mergel, 2012:34).

However, citizen use of Web 2.0 technologies does not necessarily lead to greater citizen utilization of Gov 2.0. The gap between actual citizen participation and Gov 2.0 online availability indicates the need to move from the traditional model of government's one-way communication. An integrated approach that focuses on the use of Gov 2.0 involving citizen participation will allow them to create their own value.

Vigoda (2002) argued that citizens have largely favoured the easy chair of consumer over the seat of participatory involvement". Furthermore, some scholars asserted that greater citizen participation would expose the government to negative or unconstructive pressures (Zavattaro and Sementelli, 2014). For example, in the U.S. a group posted a petition on the White House's website to ask the government to build a Death Star, which is a fictional space station from the "Star Wars" movie. Under normal circumstances, 25,000 signatures would signal the need for an official response from the government. In this case, the petition gathered more than 34,400 signatures, which required an official response. Subsequently, the official number of signatures required before an official response is given, was changed from 25,000 to 100,000 (Farrington,

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2013). Another example of unconstructive participation is when the government attempts to shift the burden of decision-making to its citizens, as occurred recently with the referendum in Greece. However, when citizens realize the value of participation, they will be more willing to participate. After all, low participation does not only limit the quantity of citizen contribution, but also undermines its quality (Nyiri et al., 2007). Furthermore, a greater number of participants in the process will reduce or negate the effect of unconstructive participants (Noveck, 2008).

Despite the rapid growth in e-government research and practice, issues concerning citizen low-level of participation in Gov 2.0 have not been systematically studied. Although extensive work has been done on related issues, including the relationship between citizen empowerment and use of e-government systems, little research has been conducted from an empirical perspective in the Gov 2.0 context (Joseph, 2013). The motivation for this research paper arose from previous studies on Gov2.0 that reported citizen low levels of utilization.

The public sector is an ideal field for the study of Web 2.0 technologies, as governments have recognised that, compared with current practices, these tools can be more efficient, more effective and more useful as a means of reaching their citizens, many of whom have complex and diverse needs (e.g. minority groups and welfare recipients).The problem is well illustrated by examining citizen utilisation of many Gov2.0 tools and applications, which is lower than anticipated (Bertot, Jaeger, and Grimes, 2012; Panagiotopoulos et al., 2011). This research paper aims to investigate citizen participation in Gov 2.0 via the theoretical lens of empowerment. Hence, we propose a research model based on this theory. Thus, this paper addresses the following research question:

From an empowerment theory perspective, what are the factors that influence citizens participation in Gov 2.0?

The theoretical lens of empowerment is by no means an all-encompassing term that can fully explain the phenomenon of citizen participation. However, we intend to critically examine citizen participation in Gov 2.0 from different perspectives.

This paper begins with the conceptual background introducing the research framework for studying empowerment theory. This is followed by a review of the concepts in the framework (Figure 1). Next, a research model (Figure 4) and associated hypotheses are proposed. It concludes with implications for theory and practice, and suggests avenues for future work.

2. Conceptual background

The theoretical background of the paper is based on empowerment theory and citizen participation in Gov 2.0 (Zimmerman and Rappaport, 1988). Therefore, several streams of research are reviewed, including (a) Gov2.0 and the impact of empowerment on the legitimacy of the government; (b) empowerment theory and its impact on citizen satisfaction and participation in Gov 2.0; and (c) literature on the satisfaction and empowerment theories that can potentially increase citizen participation in Gov 2.0.

The empowerment notion has been commonly used in the domains of psychology (e.g. psychological empowerment) (Spreitzer, 1995), management (e.g. employee empowerment) (Ugboro and Obeng, 2000), education (e.g. student empowerment) (Warschauer, Turbee, and Roberts, 1996), and medical science (e.g. patient empowerment) (van Uden-Kraan et al., 2008). Recently, there has been increased interest in the concept of empowerment among both Information Systems (IS) researchers and practitioners. For example, Psoinos, Kern, and Smithson (2000) examined the role of IS on employee empowerment in the British manufacturing industry. Their findings confirmed that research participants viewed IS as an important enabling tool as it offered many opportunities for empowerment. However, the role of IS was seen as supportive rather than initiative; hence, IS did not lead to employees becoming empowered. Ghose (2001) studied the use of Geographic Information Systems (GIS) in terms of community empowerment and showed that other factors besides GIS are needed including the openness of government and resources sharing.

A review of the literature cited above clearly shows that empowerment is an emerging concept used by researchers to explain the motives to IS use. Nevertheless, the empowerment concept in the field of e-government is still in its infancy (Li and Gregor, 2011). For example, most e-government scholars have dealt with empowerment as a set of techniques without focusing on its nature or the processes underlying the concept.

There have been several streams of research into citizen participation in the field of e-government. One stream of research focuses on empowerment as the outcome. Li and Gregor (2011) investigated the effect of the design features of online advisory systems on citizens' empowerment. Their findings indicate that the inclusion of more sophisticated explanatory features in online advisory systems empowers people to perform self-assessments, explore different options, interpret the decision-making process and predict their application outcomes.

Other streams have focused on empowerment as the highest level of citizen participation. Macintosh (2004), among others, proposed a scale of citizen participation via ICTs in policy-making starting from enabling to engaging and then to empowering. Enabling is about using ICTs to provide relevant information in an accessible and understandable format. Engaging with citizens is concerned with consulting a broader audience about a government initiative. Enabling and engaging are usually top-down perspectives in terms of access to information and reaction to government-led initiatives. Empowering, from the bottom-up perspective, is about citizens being producers rather than consumers of policy. This level recognises the need to allow citizens to influence and participate in the policy formulation process. Others associate the top-down approach with control and bottom-up with empowerment (Malone, 1997).

Although each of these streams makes significant contributions to the literature on the relationship between citizen empowerment and participation, we believe that their understanding of the citizen empowerment concept is too narrow and lacks focus (Aladalah, Cheung, and Lee, 2015a). Hence it is crucial to examine citizen empowerment and its elements. In order to address this gap in previous research on e-government, this paper proposes a framework for studying citizen empowerment in Gov2.0, depicted in Figure 1 below.

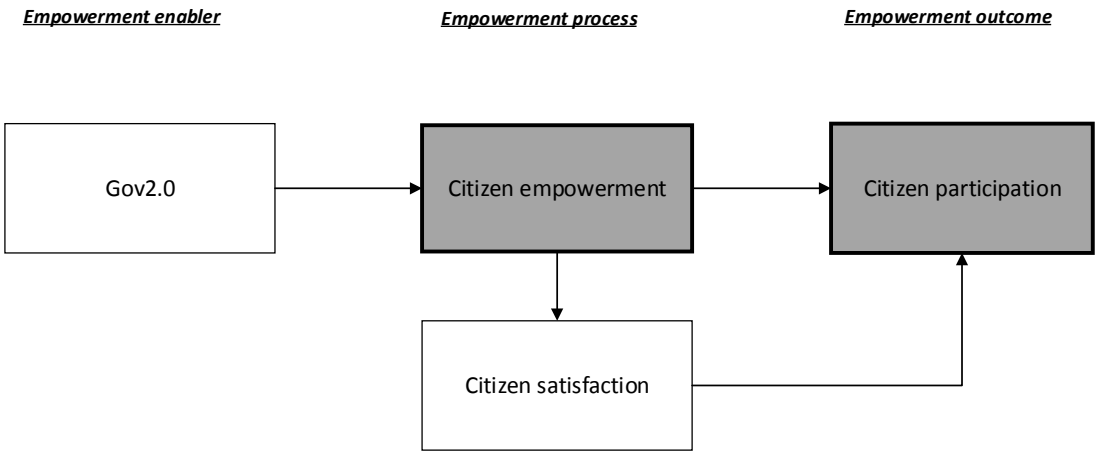

Figure 1: Research framework for citizen empowerment

Figure 1 shows the overarching framework for investigating citizen empowerment. It includes empowerment enablers, processes as well as outcomes. Further, it shows the impact of citizen empowerment on satisfaction. In turn, citizen satisfaction is associated with empowerment process and influences the empowerment outcomes that are realised by higher levels of citizen participation in Gov2.0.

Unlike the conventional perspectives of empowerment in e-government research, we propose a different view which is consistent with the way that empowerment is viewed in other fields. In doing so, we differentiate between citizen empowerment and citizen participation. This argument is consistent with the view of Barki and Hartwick (1994) concerning user involvement and user participation in the process of information system development. They suggested that the term "user participation" be used instead of "user involvement" when referring to the activities that users perform in the system development process. They argued that the term "user involvement" indicates the importance and personal relevance of a system to a user, whilst "user participation" refers to the assignments, activities, and behaviours that users or their representatives perform during the system's development process (Barki and Hartwick, 1989). This paper proposes that citizen empowerment is a psychological state of the individual and consists of enablers, processes and outcomes (Figure1). We take these into account, together with the assumptions underlying the empowerment concept. Table 1 describes the concepts of the research framework.

Table 1: Empowerment framework concepts

Concept	Definition	Reference
Empowerment enabler		
Gov2.0	The use of social networking platforms, content creation and sharing tools, web logs, and microblogging tools within government organisations and their interactions with citizens.	(Mergel, 2012)
Empowerment process		
Citizen empowerment	Where people create or are given opportunities to control their own destiny and influence the decisions that affect their lives.	(Zimmerman, 1995)
Citizen satisfaction	Positive feeling about relationship with the government; a pleasurable or positive emotional state resulting from using Gov2.0.	(Li and Gregor, 2011)
Empowerment process		
Citizens participation	The level of citizen activities and behaviours in Gov2.0.	(Barki and Hartwick, 1994)

We present citizen empowerment as an intervening variable between Gov2.0 and citizen participation. Citizen empowerment and citizen participation are two distinct concepts, with empowerment leading to participation, and satisfaction mediating the relationship between empowerment and participation. The roles of citizen empowerment and citizen participation are different, depending upon whether it is mandatory to use the system, or whether it is voluntary. (Hartwick and Barki 1994; Venkatach et al. 2003) However for the purpose of this paper, we assume that the use of Gov2.0 is voluntary.

2.1 Gov 2.0

Web 2.0 is defined as a set of technologies (e.g. RSS, XML), applications (e.g. blogs, wikis, social networks) and concepts (e.g. collective intelligence, produsage (a merging of “production" and "usage"), and perpetual beta (continue to release new features that might not be fully tested). Web 2.0 includes social networking services (Facebook, MySpace), social media or multimedia sharing (YouTube, Flickr), wikis, blogs, micro blogs (Twitter), and mash-ups (Bertot et al., 2010). Web 2.0 technologies have changed the Internet from a place for publishing information into a place where knowledge and resources come together to form an enormous collective force (Tapscott, Williams, and Herman, 2007). Web 2.0 technologies have reached all parts of the public sector, regardless of the level of government (local, state or federal) or types of activities. Web 2.0 technologies have changed the way in which government agencies share and communicate information, leading to the concept of Gov 2.0 (Bonsón et al., 2012).

Today, Gov 2.0 is already a part of most governments’ current and future plans (Larsson and Grönlund, 2014) due to its popularity among public administrations. The transition from a culture of “need to know” to a culture of “need to share” (Dawes, Cresswell, and Pardo, 2009), has also reformulated the relationship between citizen and the government by creating a platform for public participation. Many benefits are expected of Gov 2.0, such as providing up-to-date information in real-time (Jaeger and Bertot, 2010), and exchanging information with citizens to promote new services. Furthermore, many third party Web 2.0 technologies (e.g. Facebook and Twitter) are free of charge and allow a wider range of citizens to be reached in a personal manner. Thus, governments can control costs and target segments of the citizen population in a way that was not previously possible (Hofmann, 2014).

More importantly, Gov2.0 offers a platform that allows citizens’ input to be integrated into the decision-making process, and increases transparency by sharing information (Mergel, 2013), which offers justifications for the process and consequently increases citizen satisfaction (Verdegem and Verleye, 2009). Furthermore, Gov2.0 is an inexpensive means of acquiring the expertise and feedback of individuals (i.e. crowdsourcing), where citizens and government are becoming partners, or, as Linders (2012) puts it, “we-government”.

However, Government agencies that appear to be socially active by using Gov2.0 technologies are often unwilling to fully interact, fearing that their control will be weakened (Brainard and Derrick-Mills, 2011). According to Mergel (2013), Gov 2.0 is used mainly as an information “push” strategy (i.e. broadcast channels), rather than a platform to encourage citizen participation. Studies examining the use of Gov 2.0 in many

countries (e.g. Germany, Hofmann et al. 2013; UK, Mundy and Umer, 2012; and South Korea, Cho and Park, 2012) have confirmed this one-way interaction practice. Web 2.0 users are pro-active and expect governments to react quickly and the limited one-way communication on the government side might prevent citizens from interacting in Gov2.0. One reason for this one-way communication is the lack of financial and personnel resources, as Gov2.0 requires a new administrative position that is responsible for maintaining its presence by updating information or responding to citizens (Hofmann, 2014).

As citizens share more of their private lives on public forums such as Facebook and Twitter, they expect the same from the government. Gov 2.0 can create the perfect platform where citizens can participate, engage and collaborate. These platforms can more easily facilitate the interaction compared with traditional methods. However, citizen participation should not be taken for granted. Gov2.0 needs to attract a satisfactory number of users (Osimo, 2010), in order to be considered as efficient and justify its investment (Jaeger, 2003). In addition, citizen usage of Gov 2.0 is not always clear (yet), and is still rather limited (Molinari and Ferro, 2009). For example, a study in the U.S. has shown that citizens are more interested in posting to a Facebook page about political issues than signing an e-petition about the same issue (Bertot et al., 2012). This shows that citizens are unwilling to actively participation in Gov 2.0, because it does not generate value for them (Molinari and Ferro, 2009). Thus, governments are missing opportunities to better reach out to their digitally engaged citizens.

Government is a system usually defined by its goals and objectives and the types of tools used to achieve them. There is disagreement about the degree and impact of Gov 2.0 on the government-citizen relationship and the level of citizen participation. In many cases, Gov 2.0 is intended to reach citizens on platforms that are already being utilized in society such as Facebook, Twitter, YouTube, blogs, Flickr, and LinkedIn. Research from the U.S. (Kavanaugh et al., 2012), the European Union (EU)(Bonsón et al., 2012); Mexico (Sandoval-Almazan et al., 2011) and Australia (Omar et al., 2012) has confirmed this conclusion. Mergel (2013), when investigating the reasons for Gov 2.0 adoption in the U.S., found that it was mainly market-driven: agencies were trying to be where the citizens are, to reach most of the growing population and to cover the potential communication channels with the public to obtain feedback and disseminate information. However, governments need to find the right balance of information dissemination, as information overload leads to dissatisfaction (Maier, Laumer and Weinert, 2013).

However, the e-government use of Web2.0 tools and applications is not limited to these activities. Gov 2.0 includes government agencies' use of Web 2.0 tools and applications on their Websites, in addition to Facebook, Twitter, YouTube, and LinkedIn. For example, government agency blogs that provide mostly text-based content-sharing services. These blogs are updated relatively infrequently, perhaps once or twice a week and could be integrated into an agency's website. It allows citizens to subscribe to the update through RSS feed, and provides more informal rather than official press releases. It also allows citizens to leave comments and discuss the content. Another example of Gov2.0 is wikis; for instance, the FBI's Bureaupedia operates as a knowledge transfer tool to learn from staff who are leaving or retiring (Nam and Sayogo, 2011).

Many government agencies have also developed apps to promote citizen participation via mobile devices, providing real-time location and specific information (Bertot et al., 2010). For example, Boston's "Citizens Connect" app offers a platform enabling citizens to report problems, thereby transforming the citizen-government relationship. The app was launched in 2009 to enable citizens, via their smartphones, to report problems such as graffiti or damaged sidewalks/potholes they see in the city (Cityofboston.gov, 2015). Once the problem has been fixed, a photo is sent via the app to the citizen(s) who made the report. The app received an overwhelming positive response from citizens who reported "When calling, we feel like we are complaining, but when we use the app, we feel like we are helping" (Towns, 2013). We argue that this feeling is related to empowerment as citizens experience a sense of control and influence, which tends to foster ties between citizens and government agencies; thus, Gov2.0 becomes more citizen-oriented (Aladalah, Cheung and Lee, 2015b).

Gov2.0 has the potential to provide engagement processes with established criteria that ensure that fairness, mutually respectful discussions, social learning and most importantly, public opinion are valued and considered. One of the most promising aspects of Gov 2.0 is its participatory and interactive nature, which allows for two-way communication (Linders, 2012). The digital future is moving forward with the increasing pervasiveness of Web 2.0 technologies, and governments need to respond and take a stand. The expectation that Gov2.0 will improve transparency, collaboration, participation and openness has been partially realized in some areas, but is non-existent in others (Nam, 2011). There are still doubts about the viability of Gov2.0;

Millard (2010) labels it government 1.5, i.e. not quite achieving the potentials of Gov 2.0. Hence, Gov 2.0 needs to be evaluated from the citizens' perspective. By taking the citizens' perspective and the empowerment process into account, this will enhance citizen participation in Gov 2.0

2.2 Citizen empowerment

Empowerment refers to the process of gaining superiority over issues of concern, whether by individuals, organisations or communities (Zimmerman and Warschausky, 1998) and outcomes relating to control, knowledge, and participation (Zimmerman and Rappaport, 1988). Control and participation are essential elements of empowerment theory and apply at any level of analysis, whether individual, organizational, or communal. Conger and Kanungo (1988) defined empowerment as a process by which an individual's belief in one's self-efficacy is enhanced. The empowerment theory has its roots in self-efficacy (Bandura, 1986) and expectancy theories (Lawler and Suttle, 1973). Self-efficacy theory is derived from internal needs such as self-determination (Deci, 1975), competence motive (White, 1959), power (McClelland, Koestner, and Weinberger, 1989), and self-actualization (Maslow, 1954). Bandura (1977) mentioned four sources from which individuals directly receive information about their self-efficacy: performance accomplishments, vicarious experience, verbal persuasion, and physiological states. These sources influence the cognitive process of empowerment. Building on these four sources of self-efficacy, Conger and Kanungo (1988) developed five stages in the empowerment process (Figure2).

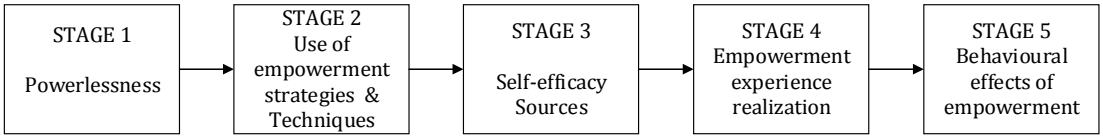

Figure 2: Conger and Kanungo's (1988) stages in the process of empowerment

As shown in Figure 2, the first stage concerns the conditions that create a psychological state of powerlessness. This leads to the use of empowerment strategies in Stage 2. These strategies are intended to remove the conditions responsible for powerlessness. Stage 3 provides the self-efficacy sources (Bandura, 1977). As a result of receiving such information, empowerment experience is realized in Stage 4, subsequently leading to the behavioural effects of empowerment in Stage 5.

The expectancy theory suggests two types of expectations that will increase the amount of effort put into a task: (a) the expectation that the effort will result in the desired level of performance; and (b) the expectation that the performance will produce the desired outcomes (Lawler and Suttle1973). Bandura (1986) interpreted the former as the self-efficacy expectation and the latter as the outcome expectation. The distinction between these two is critical, because when individuals are empowered, their self-efficacy expectations are increased; however, their outcome expectations may not be affected. Citizen empowerment develops a sense of personal mastery or a "can do" attitude regardless of performance outcomes (Conger and Kanungo, 1988). Empowering implies raising citizens' beliefs in their own effectiveness rather than raising citizens' hopes for favourable performance outcomes. Even when citizens desired outcomes are not met or achieved, citizens may feel empowered and satisfied that their efficacy belief is reinforced.

Often, scholars have presumed that empowerment is a synonym for the sharing power; therefore, empowerment as a construct has not been analysed beyond the power concept. Before critically analysing the empowerment construct, it is important to examine two concepts underlying the notion of empowerment: power and control. Control and power can be viewed in two different ways and, hence, empowerment can be viewed in the same manner: firstly, as a relational concept used to describe the perceived power or control that an individual or organisation has over others (Farrell and Petersen, 1982; Pfeffer, 1993). According to this stream of literature, power is established because of the dependence and/or interdependence of actors. The relative power of one actor over another is a product of the net dependence of the one on the other (Pfeffer, 1993). Therefore, if Actor X depends more on Actor Y than Y depends on X, then Y has power over X. When considering empowerment in terms of this relational dynamic, it becomes the process by which power is shared, highlighting the idea of sharing authority. The Oxford English Dictionary defined the verb to empower as "to give (someone) the authority or power to do something". In the management literature, most of the

notions of empowerment deal with participative management approaches such as management driven by objectives, and goal setting by employees as a way of delegating authority or sharing power.

The second view of empowerment sees it as a motivational concept. Power and control, in the psychology literature, are used as motivational forces that are core to individuals. For instance, McClelland et al. (1989) argued that individuals have a need to influence and control other people. Other psychologists proposed the urge to control and handle life events (Rothbaum et al., 1982). Therefore, individuals' needs for power are met when they perceive or believe that they have the power to cope with situations, or people. In this sense, power refers to an inherent need for self-determination (Ryan and Deci, 2000) or self-efficacy (Bandura, 1993). Any managerial approach strengthens this self-determination need, or the self-efficacy belief of employees will make them feel more powerful. In fact, the Merriam Webster's Dictionary defined the verb empower as "to enable", which implies encouraging through enhancing personal efficacy.

In the public administration literature, power and empowerment have been used interchangeably (Cameron and Whetten, 1983; Neilsen 1986). However, Burke (1986) differentiated the two notions, viewing empowerment in the context of delegation rather than in the context of enabling. Nevertheless, in the field of e-government, this concept is still in its infancy (Li and Gregor, 2011). We therefore follow the process approach to empowerment as a motivational phenomenon.

Zimmerman and Warschausky (1998) proposed three dimensions of empowerment theory: values, processes, and outcomes. Values refer to a belief system that determines how professionals and clients work together, with attention focused on competence. The process refers to the procedures that provide individuals with opportunities to develop the skills necessary to gain control and learn to analyze their socio-political environment. Empowerment outcomes refer to the consequences of the empowering processes or the interventions and the measurement issues. Empowerment outcomes are the main concern because they provide the foundation for analysing the consequences of citizen empowerment. Generally speaking, the literature tends to see citizen empowerment in terms of the outcomes. However, empowerment outcomes vary depending on the levels of analysis.

Thomas and Velthouse (1990) in the organisational literature, suggested four elements of empowerment: sense of impact, competence, meaningfulness and choice. Impact refers to "performance-outcome expectancy", and competence refers to "effort-performance expectancy". The distinction between the first two elements is the belief that one's behaviour could have an impact (sense of impact) and the belief that one is able to execute the relevant behaviour competently (competence). Others used the concept self-efficacy or personal mastery for competence (Berry and West, 1993). Meaningfulness refers to the value of the task or its purpose, compared to one's standards. Higher levels of meaningfulness are expected to result in commitment and involvement (Sjoberg et al., 1983). Choice refers to whether the behaviour is perceived as self-determined and the responsibility for one's actions. Rotters (1966) included the notion of sense of control along with self-determination, as an essential element of empowerment. The experience of having choice and autonomy reflects the sense of control of one's destiny (Thomas and Velthouse, 1990). A detailed discussion of the four elements of empowerment is presented in section 3.

We conceptualize empowerment in motivation terms and argue that these four elements, i.e. sense of impact, competence, meaningfulness and sense of control are important and relevant to the research context, i.e. Gov 2.0. When citizens influence the decision-making and experience empowerment over citizen-government matters, they are likely to be satisfied with Gov 2.0 and subsequently increase their participation (See Figure 1).

2.3 Citizen satisfaction

Early research on satisfaction defined it as a positive emotion or pleasurable experience (Locke, 1976). Oliver (1981) added that satisfaction is a result of experiences matching expectations. Both views highlight the psychological state related to satisfaction that could change with time. Generally, there are two schools of thoughts regarding user satisfaction. On one hand, there are those who consider that expectation of service quality leads to satisfaction (Parasuraman, Zeithaml, and Berry, 1985, i.e SERFQUAL); on the other hand, the service quality advocates view satisfaction as an antecedent to service quality (Cronin and Taylor, 1992, i.e. SERPERF). Oliver (1980) distinguished between service quality and user satisfaction by suggesting that service quality has a higher cognitive content, and user satisfaction is heavily loaded with affect. Furthermore, Oliver (1993) proposed that satisfaction mediates the effect of pre-perceptions of service quality and causes post-perceptions of service quality. So, user satisfaction involves both the means and ends, thereby reflecting both

emotional and cognitive elements. However, in trying to address the disparate notions about satisfaction, we have adopted an integrated conceptual view. Starting from the perspective of the research framework for citizen empowerment (Figure 1), we argue that citizen satisfaction mediates the relationship between empowerment and participation. Furthermore, citizen satisfaction with Gov 2.0 has a positive influence on their participation.

Hunt (1991) suggested that attitude may be thought of as an emotion (e.g., joy), whilst satisfaction is considered to be an assessment of that emotion (i.e., whether the experience was as enjoyable as expected). Therefore, one could conceive the experience of service as enjoyable (i.e. positive attitude), but if it fell below expectations, one may feel dissatisfied. IS research stressed the relationship between attitudes and perceptions in terms of participation and satisfaction (Venkatesh et al., 2003). Prior research has shown that intention is a good predictor of behaviour (Ajzen, 1991; Davis, 1989; Venkatesh et al., 2003), with intention influencing use that in turn leads to citizen satisfaction. As the use of IS helps individual to meet their information needs, this will lead to increased satisfaction.

According to the expectation confirmation theory, consumer satisfaction usually influences their loyalty to a product or service, and consequently their intention to repeat purchasing the same product or service (Oliver, 1980, 1997). Bhattacherjee (2001) found in his study that confirmation of expectation when using an information system is a strong predictor of user satisfaction, which in turn influences the intention to continue using the system. Satisfaction is considered as the key to building and retaining a loyal base of long-term consumers. Furthermore, use and satisfaction are indicators of the success of services (Anderson, Pearo, and Widener, 2008; Chan et al., 2010). Venkatesh and Goyal (2010) also emphasise the relationship between expectation and satisfaction.

In the e-government context, Li and Gregor (2011) defined citizen satisfaction as a positive feeling about one's relationship with the government. We define satisfaction as a positive emotional experience resulting from an interaction with Gov 2.0. The public sector has increasingly focused on performance measurement of factors such as efficiency and effectiveness (Bertot and Jaeger, 2008). Another performance measurement from a user perspective, such as user satisfaction, has been increasingly employed lately by the public sector (Verdegem and Verleye, 2009). It has been acknowledged that citizen satisfaction can be increased by recognising citizen needs and expectations of public services (Chan et al., 2010). In the public sector, the key to understanding the quality of services and fulfilment of public value lies in recognising the discrepancies between citizen expectations and their experiences with services (ICCS, 2013). According to Verdegem and Verleye (2009), in the e-government context, both concepts are related; if the experience of the service exceeds the expectations, then satisfaction will be high and vice versa.

A number of studies investigated citizen satisfaction with e-government systems and several models have been developed (van Dijk, Peters, and Ebbers, 2008). For example, Chan et al. (2010) found that performance and effort expectancy when using e-government system influence the level of citizen satisfaction. Similary, Horan and Abhichandani (2006) showed that citizen satisfaction with e-services is influenced by the factors of accessibility, utility, and customisation. Welch et al. (2005) argued that citizen satisfaction with e-government is related positively to trust in government. Tolbert, Mossberger, and McNeal (2008) are in agreement with this view, and concluded that a positive correlation exists between e-government system usage, and satisfaction with e-government. Verdegem and Verleye (2009) proposed a comprehensive model for assessing user satisfaction of e-government. They concluded that satisfaction can also influence citizens decision whether or not to use e-government services. Venkatesh, Chan, and Thong (2012) confirmed the importance of service attributes in influencing citizens intentions, usage and satisfaction with e-government services. Alalwan (2013)'s findings confirmed that citizens 'satisfaction has a positive effect on the continued use of Gov 2.0.

Hence, it could be argued that these studies provide support for the empowerment-satisfaction and the satisfaction-participation associations depicted in Figure 1. Gov2.0 users experiencing the empowerment process are more likely to increase their self-efficacy, which has been shown to be a key to citizen satisfaction. On the other hand, satisfaction appears to be positively correlated with higher participation in Gov2.0. While citizen satisfaction is important, a more detailed discussion is beyond the scope of this paper, and therefore is not included in the research model (Figure 4). However, inclusion of citizen satisfaction in the research framework (Figure 1) provides greater comprehensiveness and complements the empowerment theory.

2.4 Citizen participation

Participation is usually considered as "taking part" (Barki and Hartwick, 1994). According to Vroom and Jago (1988), participation occurs when an individual contributes to something. It could take many forms: direct (through one's action) or indirect (through others' representation); formal (formal mechanisms) or informal (informal discussions); performed alone (done by oneself) or shared (done with team). In this paper, citizen participation is broadly defined as involvement in any organized activity in which the individual participates without pay in order to achieve a common goal (Zimmerman and Rappaport, 1988).

To understand if and how government agencies are using Gov 2.0 tools to empower and involve citizens, it is worthwhile to begin with an overview of citizen participation. Citizenship can be defined as belonging to a society via the entitlements linked to rights and obligations (Isin and Turner, 2007). Others have extended the definition to include active participation (Leydet, 2014). Researchers have predicted the impact ICT tools on citizenship, highlighting universal connectivity. Hauben et al. (1997) described it as future "netizens" (Internet citizens) or "citizens of the world". Recent improvements in processing, bandwidth and network connectivity may herald, signal or indicate the evolution of digital citizenship. Hence, digital citizenship can be defined as online participation in society (Tolbert et al., 2008).

The notion of governance can be broadly defined as a social arrangement where collective resources are to be used to meet collective needs (Molinari and Ferro, 2009). Thus, it could be said that in order to manage and organise the social interaction of citizens and as a consequence of it, the public sector was founded. Nonetheless, governments in general have misinterpreted the collective needs of the society and transformed these into closed systems. Hence, the public sector that has focused on the government's needs, not those of its citizens, has therefore lost their trust and interest. In order to engage citizens, governments need to examine citizens' day-to-day needs rather than the needs of the government. A good way to do this is to reach citizens where they already are, via Web 2.0 technologies. Governments have overlooked their greatest asset: citizens.

Arnstein (1969), in a seminal paper, introduced a "ladder" of citizen participation consisting of eight rungs, and describes citizen participation as citizens' power (Figure 3). On the lowest rung of the ladder are "manipulation" and "therapy", described as nonparticipation, where the main objective is to give citizens the feeling of being participants without real participation. On the contrary, at the top of the ladder are "citizen control" and "delegated power", considered to be the highest level of citizen power. The assumption underlying Arnstein's view is that power is a zero-sum game: citizens gain power, whenever government relinquishes it. However, we argue that citizen participation in Gov2.0 process creates a win-win situation, where citizen input during the consultation process, also provides the government with justifications at the end of the decision-making process.

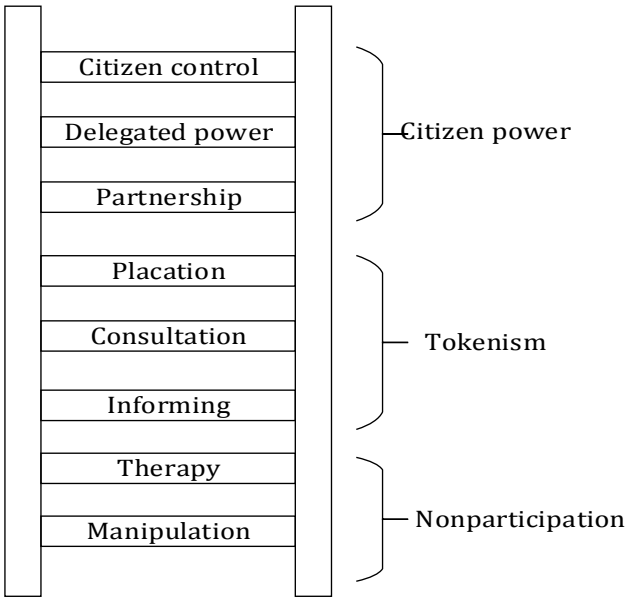

Figure 3: Arnstein's (1969) Citizen participation ladder

As the ladder indicates (Figure 3), to ensure effective participation, upper levels cannot be reached without crossing over the previous. It shows that appropriate preparation is crucial to achieve high level of participation that might otherwise result in failure.

Fung (2006) introduced the "Democracy Cube" that had three dimensions: "the scope of participation", "the mode of communication and decision" among participants, and "the extent of the participants' authority". In the first dimension, participants may be inclusively or exclusively chosen to participate. The least restrictive and more inclusive method of participation is the self-selected subset of the general public where participation is open to all who wish to take part. On the other side of the spectrum is the selection of expert administrators only, who are professional politicians, which is at odds with the terms "public" or "citizen" (Habermas, 1996). In the second dimension, six types of communication pertaining to citizen participation were identified: listening as a spectator, expressing preferences, developing preferences, aggregating and bargaining, deliberating and negotiating, and deploying expertise. The vast majority of citizens participate as spectators who receive information about some policy. In this mode of communication, citizens' views or preferences are not incorporated into a collective view or decision. The deliberation and negotiation mode of communication allows participants to discover what they want individually and collectively.

The third dimension "measures the impact of public participation" and ranges from New England town meetings (where participant decisions become town policy) to the other end of the spectrum, where participants have little or no expectation of influence but benefit personally from receiving information or fulfilling a civic obligation. The study showed that citizen participation is complementary, not an alternative, to political representation or expertise. This view supports our argument that citizen participation should be thought of as a win-win situation rather than a zero-sum game. As Dewey and Rogers (2012) example, "the man who wears the shoe, not the shoemaker, knows best where it pinches- then participants need do no more than complain to policy makers".

Reddick (2011) considered different forms of participation in government ranging from the one-way interaction (managerial), two-way interaction directed from government (consultative), and finally the highest form of e-participation of the two-way interaction directed from citizens to government and vice versa (participatory). Similarly, OECD (2014) presented three forms of citizen participation: one-way information dissemination, two-way interaction initiated from the government side and two-way interaction initiated from both sides (citizens and government), which creates an equal citizens-government relationship. Hence, this will be considered in this paper.

Currently, Gov 2.0 seems to be on the lower rungs of Arnstein's Ladder of Participation (1969) where government informs and consults, rather than on the upper rungs where citizens and government are partners, sharing responsibility for planning and decision-making. Thus, the notion of engaging citizens via Gov 2.0 activities may only exist in theory.

Investigating the theoretical background of citizen participation could provide a means to improve Gov 2.0 initiatives and programs. Technology here is perceived as a stimulator of participatory actions, boosting citizen participation not only in local communities but also in government initiatives. Furthermore, the collaborative dialogue between government and citizens can increase citizen satisfaction (Verdegem and Verleye, 2009). Moreover, Gov 2.0 can leverage and generate participatory actions from the citizens' side. As Web 2.0 tools have changed static information to a more user-driven interaction, Gov 2.0 should change citizens' right to access government information (Lathrop and Ruma, 2010) and focus more on real public participation in government; as (Meijer et al., 2012) puts it, this is "interactive openness".

3. Proposed research model

Figure 4 shows the research model for citizen empowerment and participation in Gov2.0. An overview of the model will clarify its elements. The model examines factors influencing citizen participation in Gov 2.0. Drawing upon the theory of empowerment, this model illustrates how these factors are expected to influence citizen intentions to participate in Gov2.0. The model includes four factors which are hypothesized to influences citizen participation in Gov 2.0. These four factors are: sense of impact, competence, meaningfulness and sense of control. Each factor of the model is discussed in detail below.

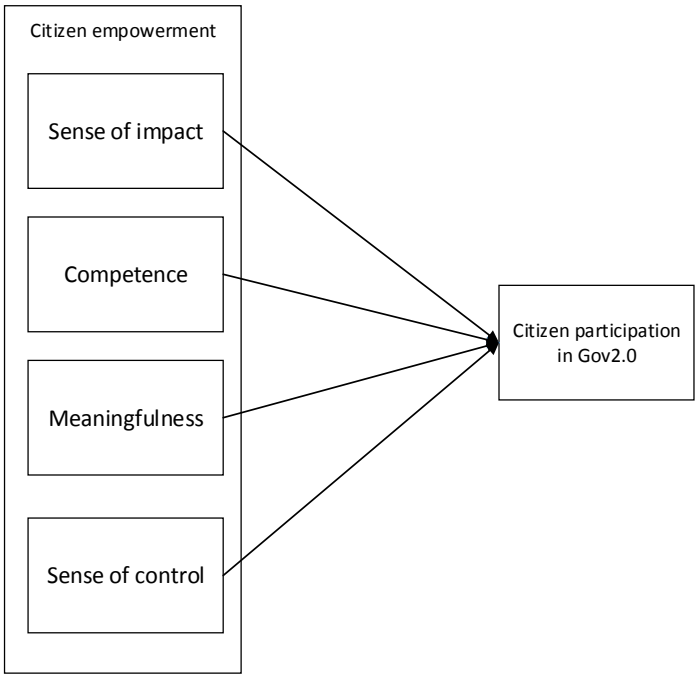

Figure 4: Research model for citizen empowerment and participation in Gov 2.0

In brief, the model reflects the empowerment theory, although its focus is on participation as the end process. Thus, citizen participation is seen here as the outcome of citizen empowerment. The model's primary aim is the positive influence of empowerment on participation. The goal here is to understand citizen participation as the dependent variable. The role of empowerment as a predictor of behaviour (e.g., participation) is critical and has been well-established in IS and other relevant disciplines (Ajzen, 1991; Davis, 1989). Further discussion of the research model constructs with accompanying hypotheses is presented in the following section. Table 2 provides operational definitions and references for these constructs.

Table 2: Operationalization of the research model construct

Construct	Operational definition	References
Sense of impact	The degree to which individual can influences the outcome of an activity; belief that one's behaviour could have an impact; performance-outcome expectancy.	(Bandura,1986); (Thomas and Velthouse, 1990)
Competence	The belief that one is able to do the relevant behaviour competently; self-efficacy or personal mastery; effort-performance expectancy.	(Bandura,1986); (Thomas and Velthouse, 1990)
Meaningfulness	The value and importance of the task or its purpose compared to one's standards.	(Nehari and Bender, 1978); (Thomas and Velthouse, 1990);
Sense of control	The degree to which individual is having a choice and autonomy in an activity	(Deci and Ryan, 2000);(Thomas and Velthouse, 1990)

Empowerment in a citizen-government relationship may be developed from collaborative, and deliberative possibilities promised by Gov2.0 that might not be achieved as expected (Brainard and Derrick-Mills, 2011; Bryer and Zavattaro 2011; Hand and Ching, 2011). Gov2.0 provides the platform to influence political decisions, involvement with others, increase responsibility, and problem solving, which are also expected to contribute to one's sense of empowerment.

3.1 Sense of impact

According to the management literature, sense of impact has been defined as the degree to which an individual can influence the outcome of an activity (Thomas and Velthouse, 1990). It refers to one's beliefs that his/her behaviour could have an impact on the outcome, or performance-outcome expectancy as proposed by Bandura (1986). Hackman and Oldham (1980) interpreted impact as knowledge of results; however, we agree with Thomas and Velthouse (1990), when they distinguish the notion of impact (i.e. influence) from competence. When citizens see their behaviour as "making a difference" in terms of achieving the purpose of the activity, that is, producing the intended effects, their sense of impact is likely to increase accordingly. Hence, in the context of Gov2.0, enabling and empowering citizens by increasing their sense of impact on the outcomes is expected to increase their levels of participation. Thus, we hypothesize:

H1: Perceived sense of impact on Gov2.0 has a positive influence on citizen participation via Gov2.0

3.2 Competence

According to the psychology literature, competence refers to the degree to which an individual can perform an activity skilfully when he or she attempts it (Thomas and Velthouse, 1990). It refers to one's belief that one is able to perform the relevant behaviour competently or to effort-performance expectations as proposed by Bandura (1986). Bandura (1977) interpreted competence as self-efficacy or personal mastery; however, here we agree with White's (1959) notion of competence. Bandura (1977) observed that individuals with low competence tend to avoid situations that require the relevant skills. This avoidance, in turn, prevents an individual from building and improving perceived competence. In contrast, high levels of competence lead to greater effort, and tenacity to face the difficulties (Abramson et al., 1978). As a result, participation in Gov2.0 may challenge citizen competence as they deal with the uncertainty.

Citizens need to have the right competence to participate in Gov2.0. Effectively harnessing the competence of citizens requires cooperation and collaboration. Citizens can bring diverse knowledge and experience to the attention of a government agency. Citizen participation in online forums has shown positive results in improving citizen competence and achieving self-actualization (Mathews, 1999). For example, in a Gov 2.0 platform discussion on immigration issues, researchers found that citizens who participated were more reasonable in their positions and opinions than those who did not participate (Chun et al., 2010). Thus, this leads to the following hypothesis:

H2: Perceived competence with Gov2.0 has a positive influence on citizen participation in Gov 2.0

3.3 Meaningfulness

Meaningfulness has been defined as the value and importance of the task or its purpose, compared to one's standards (Nehari and Bender, 1978). It refers to the significance of the activity's purpose, judged according to an individual's own ideals. In other words, it involves the individual caring about a given task. This use of meaningfulness is similar to Hackman and Oldham's (1980) term of intrinsic motivation. Shamir et al. (1989) concluded that the most important motivational aspect of leadership is the increase of meaningfulness. In the psychotherapy literature, meaningfulness represents a kind of psychic energy with respect to an activity (Nehari and Bender, 1978). Low levels of meaningfulness are supposed to result in feeling disconnected and unrelated to events (May, 1969). Higher levels of meaningfulness, on the contrary, are assumed to result in commitment and involvement (Sjoberg et al., 1983). Therefore, we formulate the following hypothesis:

H3: Perceived meaningfulness of Gov2.0 has a positive influence on citizen participation in Gov 2.0.

3.4 Sense of control

Sense of control or choice has been defined as the degree to which an individual has a choice and autonomy in an activity. It refers to whether a person's behaviour is perceived as self-determined (Deci and Ryan, 2000), and enables the choice experience (Hackman and Oldham, 1980). We have used sense of control here, rather than the more abstract, self-determination or choice as it is formed over time by the individual's assessments of his or her impact on specific tasks (Rotter, 1966). Deci and Ryan (2000) showed that a higher sense of control leads to flexibility, initiative, resiliency, and the perception of one's impact is possible. Conversely, a lower sense of control leads to tension, negative emotional tone, and lack of impact. Research in online

marketing behaviour has found that online customers who perceived their sense of control are more likely to have loyalty and commitment (Koufaris, 2002).

Sense of control is an important element in interactions (Smith, 1998), and specifically in Gov 2.0, perceived control is an important element of the process and experience. Therefore, designing a process that permits the participant to have a sense of control is fundamental (Thomas and Velthouse, 1990) to the success of Gov 2.0. Dayal and Johnson (2000) argued that citizens perceived themselves as powerless if the government did not involve them in the process of identifying obligations and rights. Following on from this line of thought, we argue that Gov 2.0 could provide benefits to citizens, including increased transparency of the decision-making process, a greater sense of control and more positive perceptions of their power situation. At the same time, this increase in sense of control can lead to trust in government, which in turn is likely to influence citizen participation (Roese, 2002). Thus, the following and last hypothesis is formulated:

H4: Perceived sense of control regarding Gov2.0 has a positive influence on citizen participation in Gov 2.0.

4. Conclusion and future research directions

To successfully implement Gov 2.0 initiatives, it is crucial to understand the factors that empower citizens to participate in Gov 2.0. At the same time, it is important to investigate how citizen empowerment makes Gov 2.0 more popular or otherwise to citizens. This paper extends the empowerment theory by applying it to the Gov 2.0 context. Four main independent constructs, i.e., sense of impact, competence, meaningfulness and sense of control and one main dependent construct, i.e., citizen participation have been proposed. This paper presents a research model (Figure 4) to investigate citizen empowerment and participation in Gov 2.0 in order to achieve the desired outcomes. E-government research needs to extend theory from other fields to enhance the understanding of this field, further complicated by the rapid demand and spread of Web 2.0 technologies. This paper contributes to both theory and practice. From a theoretical perspective, it introduces a new theoretical lens: empowerment theory. From a practical viewpoint, the model's constructs can be considered by government agencies when initiating Gov 2.0. With this theoretical introduction to citizen empowerment in Gov 2.0, there are avenues for future research.

First, we have identified citizen satisfaction as an important concept that mediates the relationship between citizen empowerment and satisfaction; at the same time, it has a direct influence on citizen participation (See Figure 1). Investigating citizen satisfaction in the context of Gov2.0 and empowerment theory is a critical research direction as it provides a holistic view of citizen empowerment and participation in Gov2.0 settings.

Second, we have proposed a research model that describes how citizen empowerment can be applied in Gov 2.0. However, it is important to investigate citizen empowerment in Gov 2.0 with a particular platform (e.g., Twitter and Facebook). This will provide a better understanding of the citizen-government interactions where other factors might emerge. As these platforms appear quickly in government agencies, it would be worthwhile to uncover these factors and investigate the similarities and differences across them to draw conclusions.

Third, we have developed a research model and four hypotheses, which need to be empirically tested (See Figure 4). An important aspect of this empirical research will be the testing of whether the identified factors will lead to greater levels of citizen participation in Gov 2.0. Relevant field research could contribute significantly to our understanding of effective citizen participation practices. Conducting interviews with administrators/public managers can shed some light in this direction. On the other hand, citizens could be interviewed in order to better understand their interactions with Gov2.0 and their expectations from government agencies. In this way, best practices may unfold in both directions.

Finally, we argue that citizen empowerment in Gov2.0 is important in understanding and explaining how citizen participation could be increased. Because much of empowerment theory research was conducted mainly in organizational settings, direct links to e-government contexts should be drawn. Although we have focused on the positive outcomes of empowerment, it is plausible that such practices may have negative outcomes. Specifically, empowerment might lead to information overload and, in turn, dissatisfaction. We have based our understanding on the empowerment theory from the management and psychology fields. In order to further enhance our understanding of citizen empowerment, it is crucial to examine how these concepts have been considered in other disciplines.

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